Cecile Leuchtenberger, Ph.D.
Department of Cytochemistry
Swiss Institute for Experimental Cancer Research
Lausanne, Switzerland

Comparative Cytochemical, Cytological and Histological Studies of Early Effects of Cigarette Smoking (Whole, Gas Phase, Constituents) in Mice and in Tissue and Organ Cultures from Mice and Humans. Grant #413-AR1

The main purpose of the proposed research project is an investigation of early interaction between native cigarette smoke or some of its constituents and intracellular metabolism. The plan to examine this relationship simultaneously in the living animal (mouse) and in mouse and human tissue and organ cultures at the cell level itself has two main specific aims:

a) Is the response of cells and tissues to exposure of cigarette smoke the same or different in vivo and in vitro?

b) Are very early alterations in cell metabolism detected and what is their relation to the occurrence of pathological alterations, including tumors, observed after long-term exposure of mice to chronic inhalation of whole cigarette smoke or its gas phase?

Such an experimental approach which places emphasis on assessment of very early sequential events at the cell level itself may help in the elucidation of the complex problem regarding the roles of cigarette smoke and other factors, such as virus infections, for etiology and pathogenesis of malignant tumors.

Current Grant Level: $32,988.

100505458

Source: https://www.industrydocuments.ucsf.edu/docs/ksmk0000